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EDUCATIONAL ACHIEVEMENT AMONG MEXICAN-AMERICANS--A SPECIAL REPORT FROM THE EDUCATIONAL OPPORTUNITIES SURVEY. WORKING PAPER.

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A NATIONAL SURVEY, INVOLVING A FIVE-PERCENT SAMPLE OF PUBLIC SCHOOLS, WAS CONDUCTED IN 1966. THE PRIMARY CONCERN CENTERED AROUND FOUR MAJOR QUESTIONS--(1) THE EXTENT OF RACIAL AND ETHNIC GROUP SEGREGATION IN THE SCHOOLS, (2) WHETHER THE SCHOOLS OFFERED EQUAL EDUCATIONAL OPPORTUNITIES, (3) THE DEGREE OF RACIAL AND ETHNIC GROUP DIFFERENCES ON STANDARDIZED ACHIEVEMENT TESTS, AND (4) THE RELATIONSHIP BETWEEN THE KINDS OF SCHOOLS ATTENDED AND ACHIEVEMENT TEST PERFORMANCE. CERTAIN FINDINGS BY MAYESKE FROM THE SURVEY REPORT BY COLEMAN AND OTHERS INDICATE WAYS IN WHICH THE EDUCATIONAL ACHIEVEMENT OF MEXICAN-AMERICANS ARE AFFECTED. SOME OF THOSE RESULTS ARE--(1) SCHOOLS CAN PROVIDE CERTAIN EXPERIENCES SUCH AS ATTENDANCE AT KINDERGARTEN AND VERBALLY ENRICHING MATERIALS WHICH WILL HELP TO OVERCOME THE LANGUAGE HANDICAP EXPERIENCED BY MANY MEXICAN-AMERICANS, (2) THE FAMILY BACKGROUND DOES INFLUENCE ACADEMIC ACHIEVEMENT, (3) BECAUSE OF PEER INFLUENCE, THE SOCIAL COMPOSITION OF THE STUDENT BODY IS HIGHLY RELATED TO ACADEMIC ACHIEVEMENT, (4) TEACHER ATTRIBUTES SUCH AS YEARS OF EXPERIENCE AND EDUCATION INFLUENCE ACHIEVEMENT, AND (5) STUDENTS' ATTITUDES TOWARD SCHOOL AFFECT THEIR ACADEMIC ACHIEVEMENT. (ES)

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Purpose and Background of the Educational Opportunities Survey

The report of the Educational Opportunities Survey (EOS), which was completed this past summer, focused on four major questions: (1) the extent to which racial and ethnic groups were segregated in the schools; (2) whether the schools offer equal educational opportunity in terms of a number of criteria of educational quality; (3) the degree of racial and ethnic group differences on standardized achievement tests and; (4) the relationship between the kinds of schools attended and achievement test performance.

A 5-percent national sample of public schools was selected to represent majority and minority children. The plan involved testing and surveying about 800,000 students in some 5,000 schools throughout the country in grades 1, 3, 6, 9 and 12 together with their teachers, principals and superintendents.

The Survey instruments were designed to collect information on: the students' personal and school background including their attitudes towards school, other children and the world, the teacher's, principal's and superintendent's professional training and experience such as the type of college they attended, their years of teaching experience and their satisfaction with teaching as a career; the schools facilities, programs, characteristics, staff, racial composition and; administrative information about the school system and its expenditures.

This paper deals with the results of the Survey (Coleman et al. 1966) that have particular relevance for Mexican-Americans. It will emphasize those findings about the educational system that enhance the educational achievement of Mexican-Americans. The presentation will be in the form of questions and answers.

What is the Relation of School Factors to Achievement?

The first and most important question is whether or not there are any differences in achievement (as measured by a standardized test) associated with the different schools that Mexican-American students attend. If there are not any differences in achievement for the different schools then we cannot expect different characteristics of the schools to be producing these differences. Analysis of differences among schools showed that approximately 20 percent of the differences in achievement among Mexican-American students could be attributed to the differences in the kinds of schools they attend (see Table 3.22.1, p. 296). In addition Mexican-Americans are one of the minority groups for whom this percentage is largest, being about one and one-half to two times as great as for the white majority.

We can enumerate some of these differences by comparing the school attributes of Mexican-American students with those of white students who live in and attend public school in the same county.

At the first grade 30 percent of Mexican-American students attend schools in which they comprise the majority of the student body (50 to 100 percent of the students). By the twelfth grade however, only 2 percent of Mexican-American students attend schools in which they comprise the majority. Thus, by the time high school is attained most Mexican-American students use school facilities in common with members of other ethnic and social groups. In the comments about inequities in the educational system that follow we must bear in mind that these are not borne only by Mexican-American students.

At the elementary and secondary levels, white students who live in the same county as Mexican-American students have more volumes per pupil in the library, more special programs for the especially skilled and talented and the pysically handicapped, more State and regionally accredited schools, fewer students in part-time attendence and fewer non-white teachers and principals.

At the elementary level Mexican-American students have more free lunch programs, more frequent art sessions and less access to free kindergartens and nursery schools than do whites in the same county. At the secondary level Mexican-American students have fewer college preparatory commercial and industrial arts curricula and more agriculture, they less often receive standardized intelligence, achievement and interest tests but have newer textbooks.

In addition the percent of Mexican-American students who are enrolled in school, when compared with whites on a national basis, becomes progressively less from the elementary to secondary levels. At the 16-17-year-age level more than 20 percent of whites than Mexican-Americans are enrolled in school.

What is the Influence of Home Background Factors on Achievement?

In considering the influence of home background factors on achievement one wonders whether the kind of language spoken in the home has an influence. Table 1 shows the average verbal achievement scores of first-grade boys and girls when they are classified as to whether English (E) or some other language (OL) is spoken in the home.

Table 1. - Average verbal achievement scores of first-grade Mexican-American students* classified by sex and whether English (E) or some other language (OL) is spoken in the home.

TABLE 1.

Males	Mean Score	No.of Students
OL	40.04	700
E	45.15	146
Females		
OL	36.96	622
E	46.10	120

Table 1 shows that for both boys and girls, achievement is greater when English is spoken in the home than when another language is used. The use of a language other than English in the home detracts more from achievement for girls than for boys.

Since the use of a language other than English does appear to detract from achievement we might ask whether or not there are experiences that facilitate achievement for children that come from non-English speaking homes. Table 2 shows the average achievement scores of first grade children classified by whether or not they have an encyclopedia in the home and subscribe to a newspaper.

Table 2. - Average verbal achievement scores of first-grade Mexican-American students classified by having or not having a daily newspaper and encyclopedia and whether English (E) or some other language (OL) is spoken in the home.

TABLE 2.

Reading Material	Mean Score	No. of Students.
Have both:		
OL	43.26	130
E	48.24	52
Have one:		
OL	41.12	328
E	44.43	78
Have neither:		
OL	35.90	454
E	41.10	40

*The average achievement test score for all first-grade Mexican-American students is approximately 47. Twenty-five percent of them have a score of 39 or less and 75 percent, a score of 54 or less.

Table 2 shows that the children from non-English speaking homes have consistently lower achievement scores than do children from English speaking homes but that those with materials in the home that are verbally enriching such as a newspaper or encyclopedia, tend to have higher achievement than those children who do not have these materials in the home.

Table 3 shows the average achievement scores of Mexican-American children who did and didn't attend kindergarten classified by whether or not English is spoken in the home.

Table 3. - Average verbal achievement scores of first-grade Mexican-American students classified by whether attended kindergarten or not and whether English (E) or some other language (OL) is spoken in the home.

TABLE 3.

Attended kindergarten	Mean Score	No. of Students
OL	43.50	596
E	45.15	182
No kindergarten		
OL	34.70	690
E	47.56	73

Again it is evident that Mexican-American children who come from non-English speaking homes have lower achievement, but among these children those who attended kindergarten score higher than those who did not. This suggests that perhaps attendence at kindergarten gives some extra impetus to those children from non-English speaking homes.

These analyses have suggested that Mexican-American children from non-English speaking homes are handicapped by their lack of facility with English when they enter school but that certain experiences such as attendence at kindergarten or verbally enriching materials in the home may give some assistance in overcoming this handicap. Information on whether or not this handicap persists in later school years is not available for Mexican-American children; however, information from other minority groups suggests that this initial handicap can be gradually overcome but that children from homes in which a language other than English is spoken are more often the victims of other circumstances which are generally felt to be detrimental to academic performance.

<u>What is the Relation of Parental Socioeconomic Status and Achievement Expectations to School Achievement</u>?

Another question is whether or not there are certain activities the parents engage in with their children that encourage them to put

greater effort into their academic work. It is to be expected that the higher income, better educated parents may have greater expectations concerning how well their children will do in school and how long they will remain in school than will parents with little or no formal education. These kinds of family background conditions such as the parental income and educational level must be determined and taken into account when ascertaining the effect of parental involvement on the child's achievement.

Table 4 shows the percent of differences in achievement test scores among Mexican-American students attributable to "objective" and "subjective" home conditions. Objective home conditions refer to such conditions as: presence of mother and/or father in the home; mother and father's education; their urban-rural background; size of family; presence of material possessions in the home such as automobile, refrigerator, TV and, presence of reading materials such as magazines, newspapers and books. Subjective home conditions refer to such things as: how often the child says he talks with his parents about his school work; whether or not he says they read to him when he was small; how good a student he says they want him to be and; how far he feels they want him to go in school.

Table 4. - Percent of differences in Mexican-American student achievement test scores attributable to objective and subjective home background conditions:

TABLE 4.

Grade	Objective Factors	Objective plus Subjective Factors	Difference
12	7.92	10.23	2.31
9	12.79	14.25	1.46
6	21.82	23.07	1.25

Table 4 shows that both objective and subjective home background conditions are most important in the early school years and although they diminish in importance in the later school years they still account for an appreciable percent of achievement. Although not large, active parental involvement in the child's education (expressed as the difference between objective and objective plus subjective) assumes slightly greater importance in the later years than in the earlier years (2.3% as compared to 1.3%). The fact that the effect of Mexican-American parental involvement is small compared with the white majority suggests that Mexican-American parents are not able to effectively translate their interest into practices that support the child's achievement.

What is the Effect of Student Body Characteristics on Achievement?

Parents have often commented that their child's behavior was influenced, perhaps unduly, by his classmates. Indeed, it seems only natural that a student's peers would influence his outlook towards educational achievement and perhaps his classroom behavior. Hence an analysis was conducted to determine to what extent attributes of other students in the school influence a child's achievement. This analysis took into account information about the schools facilities, its curriculum, the quality of its teachers, the attitudes of the teachers towards the students and the student body quality. These analyses showed (see Table 3.23.10 and 3.23.2 of the main Report) that for all grade levels, attributes of the student body tend to be more highly related to achievement than do any other aspects of the school. It was also found that this influence was least in those groups (white and Oriental Americans) where the family background places the greatest emphasis on achievement.

In addition the question of the relation of the proportion of white students in the student body to achievement was investigated. It was found that as the proportion of white students in a school increases the achievement test scores of Mexican-American students also increases and that this trend becomes more pronounced for the later school grades. This improvement in achievement is not attributable to better facilities and curriculum but rather "is largely, perhaps wholly, related to effects associated with the student body's educational background and aspirations," (p. 307).

What is the Relation of Teacher Characteristics to Achievement?

Many individuals who have been successful in later life have attributed at least part of their success to the stimulation they received from their teachers. Indeed, the question of how much influence a good teacher can have on achievement is a compelling one. This study determined what influence the teacher attributes had on achievement after the effects of home background conditions were taken into account. These results are shown in Table 5.

Table 5. - Percent of difference in achievement test scores for Mexican-American students accounted for by 7 selected teacher attributes after correcting for home background factors.

TABLE 5.

Grade Level	Percent of Achievement
12	14.63
9	11.71
6	12.59
3	2.31
1	2.18

Table 5 shows that the teacher's attributes, such as his years of experience and education, have an appreciable influence on achievement, and this influence is greater at the higher-than at the lower-grade levels. Further, the influence of the teacher is greater for Mexican-American students than for most other minority groups as well as the majority group (see Table 3.25.1 of the main Report).

What is the Relation of Student Attitudes to Achievement?

The desire of students to do well in school, often referred to as their attitude towards school or their motivation, plays a critical role in how well they actually do. Three aspects of student motivation and attitude were examined in relation to achievement: their interest in school and pursuit of reading outside school; their self-concept especially with regard to learning and success in school; and their sense of control of the environment.

Of all the items of information in the survey these attitudinal items showed the strongest relation to achievement. Even after correcting for differences in family background and the school, these attitudinal items still play a more important role than any of the others.

The one attitudinal item that was most highly related to achievement test scores at all grade levels was their belief about their ability to control or influence their environment. One of these attitudinal items asked pupils to agree or disagree with the statement: "Good luck is more important than hard work for success." Table 6 shows the average achievement test scores of pupils who agreed or disagreed with this statement.

Table 6. - Average achievement test scores of ninth-grade Mexican-American pupils* who have differing responses to the question: "Agree or Disagree: Good luck is more important than hard work for success."

TABLE 6.

Agree (good luck)	Disagree (hard work)
Average achievement test score:	
38.6	46.8

Table 6 shows the difference in achievement test scores that exists between those Mexican-American students who believe that good luck or hard work are the most important ingredients for success. Those who give "hard work or "control" responses have a higher average score than those who give "no control" responses. In addition, Mexican-American students who give "hard work" as a response score higher than do whites who give good luck as a response.

*The average achievement test score for all ninth-grade Mexican-American students is approximately 44. Twenty-five percent of them have a score of 37 or less and 75 percent, a score of 50 or less.

The differences in achievement associated with belief about one's ability to control their environment remain even after differences in home background are taken into account. This suggests that for children who have experienced a particularly unresponsive environment whether in their home or the larger society, a change in their belief about their ability to influence their environment will lead to increases in achievement.

Summary of Results

The Educational Opportunities Survey found that:

1. Family background was most important for achievement;

2. The association of family background with achievement does not diminish over the years;

3. The influence of school facilities, curriculum and staff that is independent of family background is small;

4. Teachers' characteristics account for most of the differences in school factors that are related to achievement;

5. The social composition of the student body is more highly related to achievement independently of the students own social background, than is any school factor;

6. Attitudes concerning control or responsiveness of the environment are highly related to achievement but variations in school characteristics have little influence on these attitudes.

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